

ABSTRACT OF THE DISCLOSURE

A gain-clamped optical amplifier including: optical reflection means installed on an input optical fiber or an output optical fiber; optical anti-reflection means installed on the optical fiber opposite to the optical fiber having the optical reflection means installed on; and an optical amplifier located between the optical reflection means and the optical anti-reflection means, for amplifying an input signal or an output signal, wherein an amplified spontaneous emission light emitted from the optical amplifier to the input optical fiber and the output optical fiber is reflected by the optical reflection means and amplified in the optical amplifier.